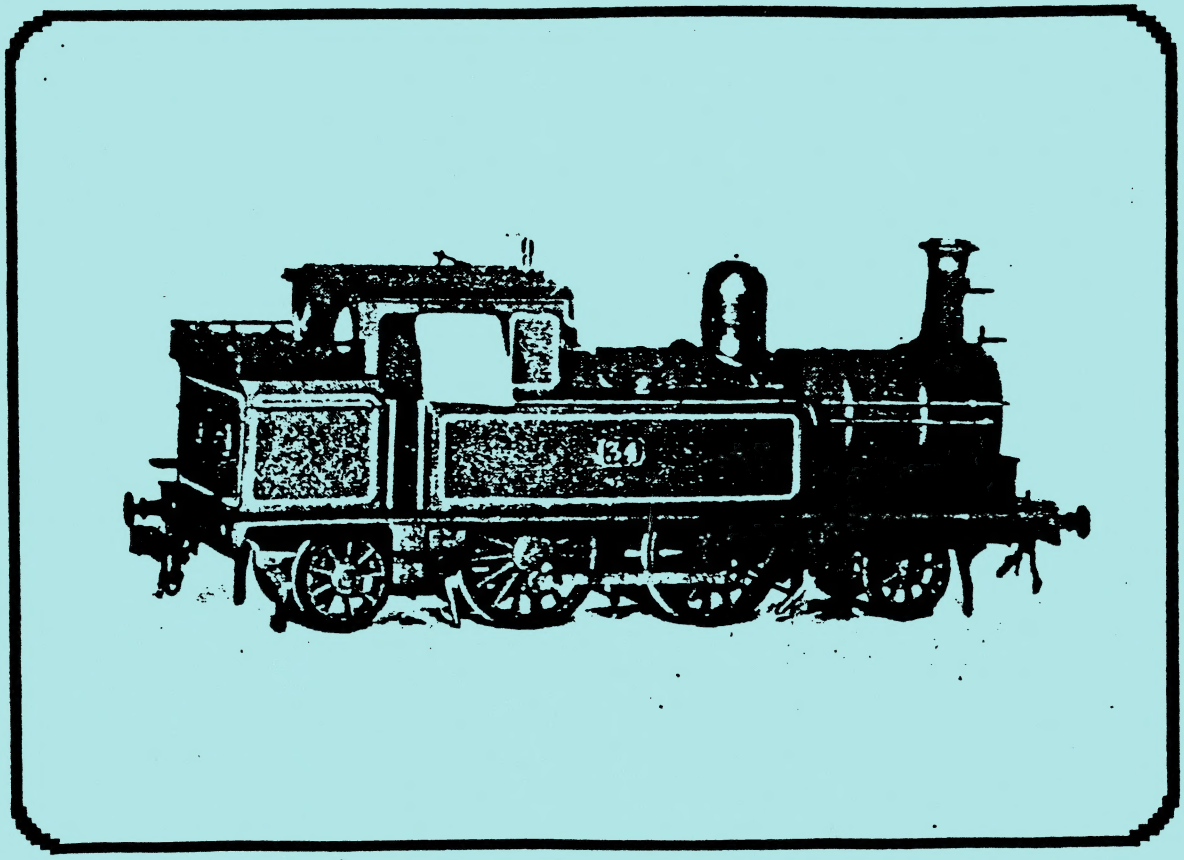
May/Jun 93 Vol 1. No 3

# COCO LINK

## The Colour Computer Magazine



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**********

Postage is $5 for software and actual charges for hardware.

Tapes are still available for the CoCo 1, 2 and 3.

**Have you produced a masterpiece of either software or hardware?**

**We can market your product both here in Australia and overseas!!**

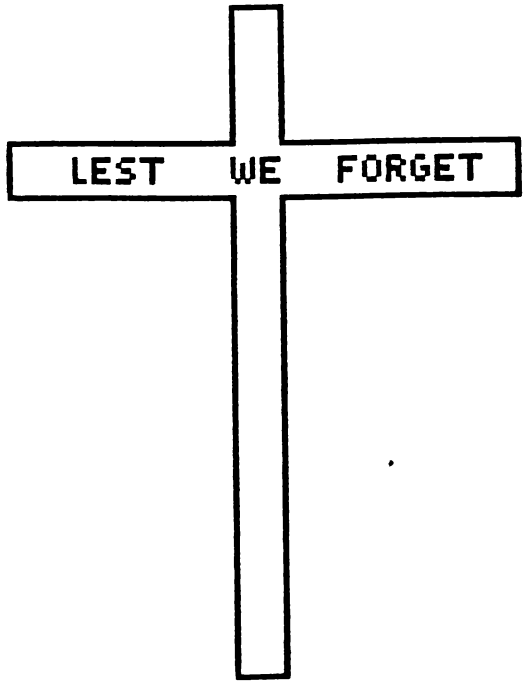
# FAREWELL COCO FRIEND

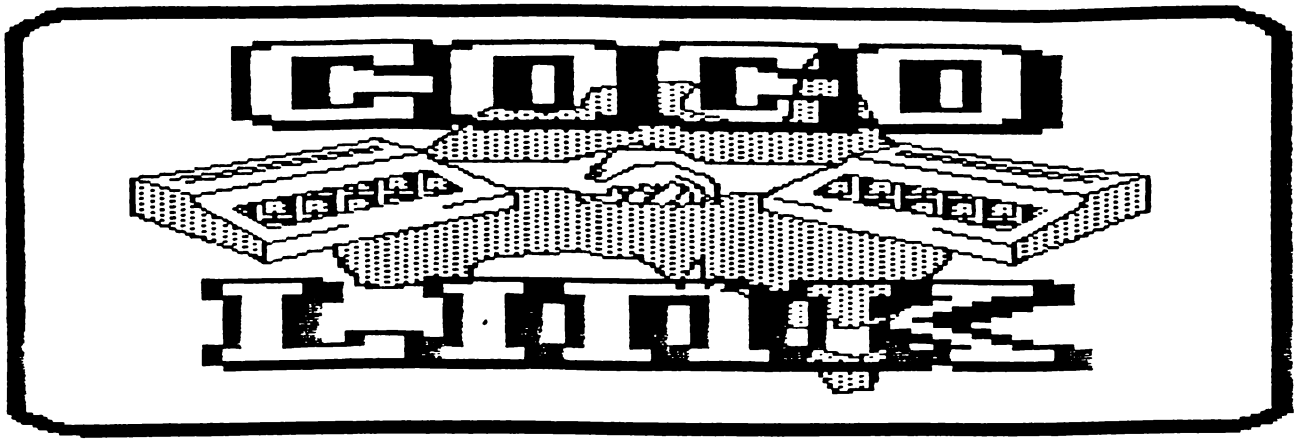
I received a letter today from Mrs Beverley White, daughter of Sam Thompson, informing me that Sam had passed away in his sleep recently.

I personally first made contact with Sam through CoCo-Link back in Dec 91, he was the first to communicate with me after my letter to Robbie asking about printing the names etc of coco users.

Since that first missive we were in touch on a fairly regular basis, asking and answering questions on a range of subjects to do with the CoCo. Sam was indicative of the CoCo community, always ready to help out a fellow CoCoist and always coming up with ideas on how to better use his machine.

Sam's demise is a great loss to his family, friends and the CoCo community, he will be sorely missed. What more can I say but rest in peace and FAREWELL MY COCO FIREND.



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# Remins Ramblings

ABOUT SUPPORT.
**********

As you are all aware, support for the CoCo is dwindling in a number of areas and we here in Australia are finding it harder and harder to purchase software and hardware for our beloved little machine.

I have received a number of phone calls and letters from users all over Australia complaining about this lack of support. To you all I say, yes there is a lack of support from the companies in the States, but, we are to a certain degree the ones to blame.

What I am about to say will more than likely upset a few people but as the saying goes, "if the cap fits then wear it". The reason for the dwindling support is a simple matter of mathematics, if a producer spends 20 hours developing a piece of software he obviously will sell this software for a price that will recoup his time and effort. If the producer sells his product for $20 then he would be hoping to sell quite a few of them to make a profit on the product. Along comes the unscrupulous user, borrows a copy from a mate and then proceeds to copy the product and give these copies out to all his mates who do the same.

The end result is that the producer can no longer afford to design and market new software and those who did the copying in the first place are left wondering from where they are going to get support.

Here is a perfect example of what I am talking about. I read about a producer by the name of Britt Monk, he produced the game Strip Tease. He sold 71 copies and received 400 enquiries with his return on his effort after expenses being a paltry $219 for a month's worth of design and assembly language programming. He received however 22 requests from people for the solution, none of the people making the request payed for the game. With a ratio of 22:1, (a figure reported to be a little conservative) on piracy, this means that there were 1,562 copies of the game in existence, yet he was payed for only 71. In fact if you do have a copy, load the programme and type in the following:

```
10 FOR I=&H3357 TO &H336E:PRINT
CHR$(PEEK(I));:NEXT
RUN
```

This will display the original purchasers name, how many of you will actually know the bloke.

All those of you who subscribe to Rainbow would by now know that the May issue is the last one, yes Rainbow has folded. Why?? Because of a lack of support.

It is now up to each and every one of you to see that those who are still supporting our beloved little machine continue to do so. BUY THEIR PRODUCTS OR SEE THEM FOLD.

IT'S YOUR MOVE!!!!!!!!!!


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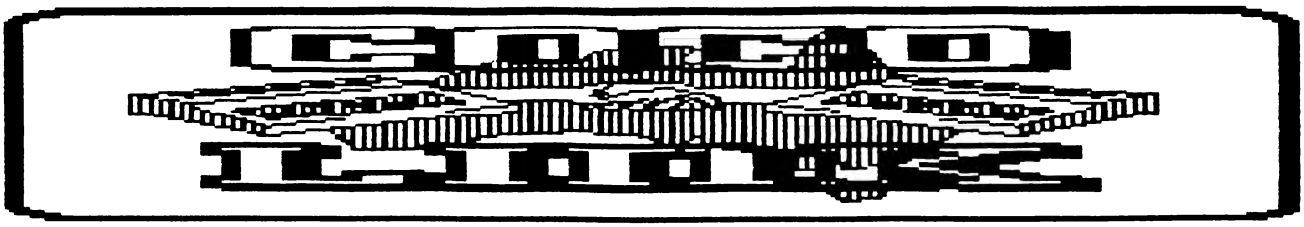

# Questions and Answers

*Deskmate problems:*
Deskmate will not open my DMP106 and I am hoping that with an OS9 manual I might be able to change the setup or install the printer driver from "Home Publisher". I am wondering if you may know a simple way to solve the problem - like how to open Deskmate's printer driver?

Rennay Bamford
23 Raeburn Rd
ROLYSTONE WA 6111

*Rennay, I personally am no guru on OS9 so I am placing your request for help here so that one of the real OS9 guru's from the CoCo community can maybe come up with an answer for you. The only suggestion I can make after having a quick look at the programme is to configure the text output just prior to printing. To do this you click on the circular ray symbol in the top right hand corner of the screen and then follow the prompts, ie, set your page size, baud rate, output path etc. If this does not work then go back to the printer and check to see if you have the dip switches set correctly, for example you may be trying to send information to the printer from the program at 1200 baud but have the switches set on 600 baud.*

*I'm afraid that is about all I can suggest with my limited knowledge of OS9 and Deskmate, lets hope someone out there can come up with a definitive solution for you.*

*ED.*

Do you have a question about your CoCo or a programme that you are using? This column is a good medium to find answers for those questions, if I can't answer them for you then I am sure there will be a cocoist within our community who has got the expertise to do so.

One question I am continuously being asked by new cocoists and those who are dusting the coco off out of the cupboard is, "What can the coco do, how can I use it?". A very simple answer is, ANYTHING. The coco has been reviewed in a number of international magazines and has been mooted as being a machine well ahead of it's time. A few things off the top of the head that the coco can be used for are, word processing, graphics, database's, spreadsheets, music, telecommunications, games even producing an international magazine or a newsletter for your club. The coco can be used for controlling any number of electronic devices and seems to be a favourite of ham radio operators.

As you can see the coco is a very versatile machine limited only by your own imagination and perseverance.

# COMPETITION

I have decided to run a competition through the pages of this magazine for all would be programmers. There are three categories, graphics, applications and games. The winner in each category will get the opportunity to make a dollar from their creation, as the winning entry in each will be marketed by REMCOMS both here and in the United States.

The rules for the competition are very simple;

1. entries in each category must be original and must not breach any laws of copyright,
2. by entering the competition authors give copyright to REMCOMS and COCO-LINK,
3. all entries must clearly state the mimimum coco configuration requirement, ie coco 3 128k or coco 2 64k etc, and
4. the judges decision is final.

All entries should be sent to this magazine on either disk or tape in the following manner;

1. two copies on the tape/disk each of which execute without bugs (I do not have the time to debug your programme)
2. all programmes should have two copies of the source code,
3. include a text file with a description of the programme in ASCII format, and
4. mark all entries "FOR COCO-LINK COMPETITION" and the category.

The prizes for the competition are as follows:

1st in each category - choice of software from REMCOMS to the value of $50 + the programme marketed with 20% of all sales to the author. REMCOMS will cover all advertising and marketing costs.

To cater for all areas of expertise, each category will have an encouragement award of software to the value of $25 from REMCOMS.

In addition to the prizes, those programmes which do not win will have their creations published in the CoCo-Link magazine for the benefit of all coco users.

This competition is open to all cocoists young, old, experienced or novice. All entries close on the 15th December 1993. Winners will be notified in the CoCo-Link magazine issue 1 of 1994 (January).

# TRAINS BY G. ELPHICK

The following two programmes have been submitted by Graham Elphick, they are pictures drawn in basic of a number of trains. I will include some more of Grahams pictures in future issues of CoCo-Link. In the mean time type these in and, enjoy.

```
20 HSCREEN2:PALETTERGB
30 HCOLOR8:HCLS11
40 PALETTE0,2:PALETTE2,4:
PALETTE4,0: PALETTE6,3:
PALETTE11,62:PALETTE13,20:
PALETTE14,3:PALETTE15,49
50 HCIRCLE(128,127),20
60 HCIRCLE(128,127),17
80 HCIRCLE(194,134),12
90 HCIRCLE(194,134),9
100 HCIRCLE(70,134),12
110 HCIRCLE(70,134),9
120 HCIRCLE(14,134),12
130 HCIRCLE(14,134),9
140 HLINE(255,146)-(0,146),PSET
150 HLINE(255,146)-(255,150),PSET
160 HLINE(255,150)-(0,150),PSET
170 HLINE(0,150)-(0,146),PSET
180 HLINE(219,120)-(0,120),PSET
190 HLINE(0,120)-(0,116),PSET
200 HLINE(0,116)-(219,116),PSET
210 HLINE(219,116)-(219,120),PSET
220 HLINE(211,116)-(206,109),PSET
230 HLINE(206,109)-(206,73),PSET
240 HLINE(206,73)-(183,73),PSET
250 HLINE(183,73)-(183,70),PSET
260 HLINE(183,70)-(175,70),PSET
270 HLINE(175,70)-(175,73),PSET
280 HLINE(175,73)-(106,73),PSET
290 HLINE(106,73)-(106,116),PSET
300 HLINE(204,73)-(202,71),PSET
310 HLINE(190,71)-(188,73),PSET
320 HLINE(202,71)-(202,19),PSET
330 HLINE(202,19)-(204,17),PSET
340 HLINE(204,17)-(202,15),PSET
350 HLINE(202,15)-(202,13),PSET
360 HLINE(190,71)-(190,19),PSET
370 HLINE(190,19)-(188,17),PSET
380 HLINE(188,17)-(190,15),PSET
390 HLINE(190,15)-(190,13),PSET
400 HLINE(190,13)-(202,13),PSET
410 HLINE(156,73)-(156,66),PSET
420 HLINE(156,66)-(154,64),PSET
430 HLINE(147,66)-(149,64),PSET
440 HLINE(147,66)-(147,73),PSET
450 HLINE(131,73)-(131,65),PSET
460 HLINE(131,65)-(127,61),PSET
470 HLINE(127,61)-(118,61),PSET
480 HLINE(118,61)-(114,65),PSET
490 HLINE(114,65)-(114,73),PSET
500 HLINE(149,64)-(154,64),PSET
510 HLINE(185,73)-(185,116),PSET
520 HLINE(124,108)-(124,73),PSET
530 HLINE(185,79)-(125,79),PSET
540 HLINE(125,83)-(185,83),PSET
550 HLINE(125,87)-(185,87),PSET
560 HLINE(125,91)-(185,91),PSET
570 HLINE(125,95)-(185,95),PSET
580 HLINE(125,99)-(185,99),PSET
590 HLINE(125,103)-(185,103),PSET
600 HLINE(125,107)-(185,107),PSET
610 HLINE(139,111)-(185,111),PSET
620 HLINE(156,116)-(156,73),PSET
630 HLINE(106,74)-(106,63),PSET
640 HLINE(106,63)-(102,59),PSET
650 HLINE(102,59)-(102,81),PSET
660 HLINE(102,81)-(93,72),PSET
670 HLINE(93,72)-(89,75),PSET
680 HLINE(89,75)-(106,92),PSET
690 HLINE(106,100)-(93,100),PSET
700 HLINE(93,100)-(93,116),PSET
710 HLINE(80,116)-(80,74),PSET
720 HLINE(80,74)-(5,74),PSET
730 HLINE(5,74)-(5,116),PSET
740 HLINE(80,74)-(75,69),PSET
750 HLINE(75,69)-(1,63),PSET
760 HLINE(1,63)-(7,69),PSET
770 HLINE(7,69)-(7,74),PSET
780 HLINE(75,112)-(75,79),PSET
790 HLINE(75,79)-(11,79),PSET
800 HLINE(11,79)-(11,112),PSET
810 HLINE(11,112)-(75,112),PSET
820 HLINE(71,83)-(15,83),PSET
830 HLINE(15,87)-(71,87),PSET
840 HLINE(15,91)-(71,91),PSET
850 HLINE(15,95)-(71,95),PSET
860 HLINE(15,100)-(71,100),PSET
870 HLINE(15,105)-(71,105),PSET
880 HLINE(45,109)-(45,81),PSET
```

```
890 HCIRCLE(128,127),4
900 HCIRCLE(194,134),3
910 HCIRCLE(70,134),3
920 HCIRCLE(13,134),3
930 HLINE(130,124)-(130,120),PSET
940 HLINE(127,120)-(127,124),PSET
950 HLINE(126,124)-(122,120),PSET
960 HLINE(119,120)-(125,126),PSET
970 HLINE(125,126)-(112,126),PSET
980 HLINE(112,129)-(125,129),PSET
990 HLINE(131,129)-(144,129),PSET
1000 HLINE(144,126)-(131,126),PSET
1010 HLINE(131,126)-(137,120),PSET
1020 HLINE(134,120)-(130,124),PSET
1030 HLINE(131,129)-(141,138),PSET
1040 HLINE(138,140)-(129,131),PSET
1050 HLINE(129,131)-(129,143),PSET
1060 HLINE(126,143)-(126,130),PSET
1070 HLINE(126,130)-(117,139),PSET
1080 HLINE(115,136)-(124,129),PSET
1090 HLINE(194,126)-(194,131),PSET
1100 HLINE(194,137)-(194,142),PSET
1110 HLINE(186,134)-(191,134),PSET
1120 HLINE(197,134)-(202,134),PSET
1130 HLINE(200,128)-(196,133),PSET
1140 HLINE(192,136)-(188,140),PSET
1150 HLINE(200,140)-(196,135),PSET
1160 HLINE(193,132)-(189,128),PSET
1170 HLINE(70,126)-(70,131),PSET
1180 HLINE(70,136)-(70,142),PSET
1190 HLINE(62,134)-(68,134),PSET
1200 HLINE(73,134)-(78,134),PSET
1210 HLINE(76,129)-(72,133),PSET
1220 HLINE(69,136)-(65,141),PSET
1230 HLINE(76,140)-(72,136),PSET
1240 HLINE(68,132)-(64,128),PSET
1250 HLINE(13,126)-(13,131),PSET
1260 HLINE(13,137)-(13,142),PSET
1270 HLINE(6,134)-(11,134),PSET
1280 HLINE(16,134)-(22,134),PSET
1290 HLINE(19,128)-(14,132),PSET
1300 HLINE(11,135)-(7,139),PSET
1310 HLINE(8,129)-(11,132),PSET
1320 HLINE(15,136)-(19,140),PSET
1330 HLINE(187,125)-(182,120),PSET
1340 HLINE(201,125)-(206,120),PSET
1350 HLINE(77,125)-(82,120),PSET
1360 HLINE(63,125)-(58,120),PSET
1370 HLINE(21,125)-(26,120),PSET
1380 HLINE(7,125)-(2,120),PSET
1381 HPAINT(195,19),7,8
1382 HPAINT(195,76),0,8
1383 HPAINT(176,76),3,8
1384 HPAINT(147,76),3,8
1385 HPAINT(150,69),2,8
1386 HPAINT(124,69),2,8
1387 HPAINT(115,78),0,8
1388 HPAINT(104,78),2,8
1389 HPAINT(70,71),2,8
1390 HPAINT(70,76),0,8
1391 HPAINT(70,81),1,8
1392 HPAINT(98,104),3,8
1393 HPAINT(127,113),3,8
1394 HPAINT(139,113),1,8
1395 HPAINT(153,118),8,8
1396 HPAINT(144,118),1,8
1397 HPAINT(132,118),8,8
1398 HPAINT(112,118),1,8
1399 HPAINT(102,118),8,8
1400 HPAINT(19,122),0,8
1401 HPAINT(63,122),0,8
1402 HPAINT(187,122),0,8
1403 HPAINT(187,148),5,8
1404 GOTO 1404
```

This is the second of Grahams graphics on trains, ensure that you have saved the one above before typing this one in.

```
10 HSCREEN2:PALETTERGB
20 HCOLOR8:HCLS11
30 PALETTE0,2:PALETTE2,4:
PALETTE4,0:PALETTE6,3:
PALETTE11,62:PALETTE13,20:
PALETTE14,3:PALETTE15,49
50 HLINE(16,134)-(240,134),PSET
60 HLINE(240,134)-(240,137),PSET
70 HLINE(240,137)-(16,137),PSET
80 HLINE(16,137)-(16,134),PSET
90 HLINE(0,0)-(255,0),PSET
100 HLINE(255,0)-(255,191),PSET
110 HLINE(255,191)-(0,191),PSET
120 HLINE(0,191)-(0,0),PSET
130 HLINE(5,5)-(250,5),PSET
140 HLINE(250,5)-(250,186),PSET
150 HLINE(250,186)-(5,186),PSET
160 HLINE(5,186)-(5,5),PSET
```

```
170 HCIRCLE(63,114),20
180 HCIRCLE(63,114),17
190 HCIRCLE(63,114),6
200 HCIRCLE(125,114),20
210 HCIRCLE(125,114),17
220 HCIRCLE(125,114),6
230 HCIRCLE(175,122),12
240 HCIRCLE(175,122),9
250 HCIRCLE(175,122),4
260 HCIRCLE(205,122),12
270 HCIRCLE(205,122),9
280 HCIRCLE(205,122),4
290 HLINE(61,98)-(61,109),PSET
300 HLINE(61,119)-(61,130),PSET
310 HLINE(64,130)-(64,119),PSET
320 HLINE(64,109)-(64,98),PSET
330 HLINE(47,113)-(58,113),PSET
340 HLINE(68,113)-(79,113),PSET
350 HLINE(79,116)-(68,116),PSET
360 HLINE(58,116)-(47,116),PSET
370 HLINE(65,110)-(73,101),PSET
380 HLINE(58,117)-(50,125),PSET
390 HLINE(52,127)-(60,119),PSET
400 HLINE(68,112)-(75,104),PSET
410 HLINE(52,101)-(60,109),PSET
420 HLINE(68,117)-(76,125),PSET
430 HLINE(74,127)-(66,118),PSET
440 HLINE(59,110)-(51,102),PSET
450 HLINE(127,98)-(127,110),PSET
460 HLINE(127,119)-(127,130),PSET
470 HLINE(124,130)-(124,119),PSET
480 HLINE(124,109)-(124,98),PSET
490 HLINE(109,112)-(120,112),PSET
500 HLINE(130,112)-(141,112),PSET
510 HLINE(141,115)-(130,115),PSET
520 HLINE(120,115)-(109,115),PSET
530 HLINE(136,102)-(128,110),PSET
540 HLINE(121,118)-(113,126),PSET
550 HLINE(115,128)-(124,119),PSET
560 HLINE(131,112)-(139,105),PSET
570 HLINE(115,101)-(123,109),PSET
580 HLINE(130,116)-(138,124),PSET
590 HLINE(135,127)-(127,118),PSET
600 HLINE(121,112)-(112,103),PSET
610 HLINE(165,108)-(220,108),PSET
620 HLINE(220,108)-(220,105),PSET
630 HLINE(220,105)-(165,105),PSET
640 HLINE(165,105)-(165,108),PSET
650 HLINE(213,108)-(213,114),PSET
660 HLINE(215,127)-(243,127),PSET
670 HLINE(243,127)-(224,108),PSET
680 HLINE(224,108)-(219,108),PSET
690 HLINE(194,121)-(186,121),PSET
700 HLINE(179,105)-(179,65),PSET
710 HLINE(208,65)-(208,105),PSET
720 HLINE(208,65)-(107,65),PSET
730 HLINE(107,95)-(179,95),PSET
740 HLINE(201,65)-(201,61),PSET
750 HLINE(201,61)-(210,21),PSET
760 HLINE(186,65)-(186,61),PSET
770 HLINE(186,61)-(179,21),PSET
780 HLINE(179,21)-(187,21),PSET
790 HLINE(187,21)-(187,18),PSET
800 HLINE(187,18)-(202,18),PSET
810 HLINE(202,18)-(202,21),PSET
820 HLINE(202,21)-(210,21),PSET
830 HLINE(106,108)-(106,57),PSET
840 HLINE(106,57)-(104,54),PSET
850 HLINE(104,54)-(77,54),PSET
860 HLINE(77,54)-(74,57),PSET
870 HLINE(74,57)-(74,65),PSET
880 HLINE(43,65)-(90,65),PSET
890 HLINE(90,65)-(90,94),PSET
900 HLINE(90,94)-(57,94),PSET
910 HLINE(106,115)-(82,115),PSET
920 HLINE(43,65)-(43,110),PSET
930 HLINE(84,54)-(84,48),PSET
940 HLINE(84,48)-(86,46),PSET
950 HLINE(86,46)-(86,35),PSET
960 HLINE(86,35)-(88,33),PSET
970 HLINE(97,54)-(97,48),PSET
980 HLINE(97,48)-(95,47),PSET
990 HLINE(95,47)-(95,35),PSET
1000 HLINE(95,35)-(93,33),PSET
1010 HLINE(93,33)-(88,33),PSET
1020 HLINE(104,54)-(122,54),PSET
1030 HLINE(122,54)-(130,62),PSET
1040 HLINE(130,62)-(142,62),PSET
1050 HLINE(142,62)-(142,65),PSET
1060 HLINE(145,65)-(145,62),PSET
1070 HLINE(145,62)-(187,62),PSET
1080 HLINE(97,52)-(125,52),PSET
1090 HLINE(125,52)-(134,60),PSET
1100 HLINE(134,60)-(186,60),PSET
1110 HLINE(124,124)-(50,124),PSET
1120 HLINE(52,127)-(124,127),PSET
1130 HLINE(150,60)-(150,55),PSET
1140 HLINE(150,55)-(147,55),PSET
```

```
1150 HLINE(147,55)-(152,50),PSET
1160 HLINE(152,50)-(156,55),PSET
1170 HLINE(156,55)-(153,55),PSET
1180 HLINE(153,55)-(153,60),PSET
1181 HPAINT(2,51),3,8
1182 HPAINT(89,51),1,8
1183 HPAINT(128,57),1,8
1184 HPAINT(152,57),7,8
1185 HPAINT(192,57),8,8
1186 HPAINT(192,72),8,8
1187 HPAINT(162,72),5,8
1188 HPAINT(100,72),7,8
1189 HPAINT(77,72),0,8
1190 HPAINT(49,103),2,8
1191 HPAINT(63,103),2,8
1192 HPAINT(73,103),2,8
1193 HPAINT(73,114),2,8
1194 HPAINT(63,114),1,8
1195 HPAINT(53,114),2,8
1196 HPAINT(56,121),2,8
1197 HPAINT(63,121),2,8
1198 HPAINT(71,121),2,8
1199 HPAINT(53,125),8,8
1200 HPAINT(57,125),8,8
1201 HPAINT(63,125),8,8
1202 HPAINT(68,125),8,8
1203 HPAINT(74,126),8,8
1204 HPAINT(78,125),8,8
1205 HPAINT(50,109),0,8
1206 HPAINT(57,102),0,8
1207 HPAINT(67,102),7,8
1208 HPAINT(76,109),7,8
1209 HPAINT(108,120),2,8
1210 HPAINT(119,122),2,8
1211 HPAINT(126,123),2,8
1212 HPAINT(134,122),2,8
1213 HPAINT(115,125),8,8
1214 HPAINT(121,126),8,8
1215 HPAINT(115,113),2,8
1216 HPAINT(127,113),1,8
1217 HPAINT(134,114),2,8
1218 HPAINT(118,107),2,8
1219 HPAINT(126,107),2,8
1220 HPAINT(134,107),2,8
1221 HPAINT(171,106),0,8
1222 HPAINT(178,113),0,8
1223 HPAINT(175,122),1,8
1224 HPAINT(195,122),0,8
1225 HPAINT(205,122),1,8
1226 HPAINT(222,122),7,8
1227 HPAINT(222,136),8,8
1228 HPAINT(79,122),2,8
1229 HPAINT(70,130),2,8
1230 HPAINT(100,125),8,8
1240 GOTO 1240
```

## PD LIBRARY

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**FREE CATALOGUE OFFER!!**

The second edition of the COCO-LINK Public Domain Library catalogue is now available FREE to all. Just write to the address below for your free copy.

The Catalogue is bigger and better than before, runs into 12 pages and must surely hold something of interest for everyone.

Programmes are arranged on disks with similar themes. The types of disk available are Education, Games, Utilities, Applications, Graphics and Music.

The library encompasses over 650 files distributed over 48 disks. Many of which are double sided. There are many new additions in all categories so there should be something to please all.
I am always looking for new material to add to the catalogue. If you have any PD material you feel would be of interest to other Coco users please share it with them by sending it here to me for inclusion in the library.

Robbie Dalzell
31 Nedland Cres.
Port Noarlunga Sth.
SA 5167

# ONE MEGABYTE RAM UPGRADE FOR THE COCO 3.

Review by Desmond Rae.

The One Megabyte upgrade for the CoCo 3 is quite a hefty little package. It comes with a 10 page manual and requires some soldering which I recommend you get done by an expert. The reason is because there is a fourty pin header that needs to be soldered on top of the CPU and if it is done incorrectly you will have some problems. But if you think you are capable enough to do it yourself, it tells you in the instruction book what to do.

It requires you to install the header on top of the CPU, then install the One Megabyte card in to the CoCo 3. After you do a RAM test and swap the One Megabyte jumper select switch and install a Nine Volt One Amp Power supply, your almost there. Then you install your original 512k Upgrade on top of the One Megabyte card and then run the RAM test again. And if successfull, you have a full One Megabyte CoCo 3! (According to the manual this would take a few hours. I have no idea actually how long it took, I bought my One Megabyte CoCo 3 from a gentleman by the name of Ron Lidgard).

The One Megabyte upgrade, which is made by Disto, features the following things-

- Transparent to all the software that supports extra memory
- Can use any other 512k memory card
- Fits completely inside the CoCo Case
- Easy installation - installs in one evening
- Includes all necessary parts
- Drivers for OS9 included

So what can it do for me? Well if you use RS-DOS a lot, well it won't do much at all. There are only a few packages about that will support the One Megabyte upgrade. Two of these packages I know of are Studio Works Pro by Oblique Triad, which is a CD quality Digital Sound Recorder which comes with an 8 bit cartridge. And Big Basic by Danosoft, which will allow you to access up to 944k for your basic programs. But if you own OS9 then you can have 944k on startup.

To install the drivers for OS9 you need to have the Original copies of OS9. There is a two page text file on the disk which comes with the One Megabyte upgrade along with a RAM checking program. The documentation on how to install the OS9 drivers is very easy to understand and the job can be done in about 20 minutes.

The only fault the documentation mentions is that if you want to play any Sierra games like Kings Quest 3 or Leisure Suit Larry, you start the games before you type in the command "MEGA", which tells OS9 you have One Megabyte. The

reason being is that Sierra games do not know how to handle the One Megabyte upgrade and if you type "MEGA" before running the games it will do nasty things to the system. This is because it does not keep a check on where the video address is at, whether it is in the first 512k or the second 512k.

Other than that small little piece you must remember, the One Megabyte upgrade is the way to go.

The only real concern I have is that the One Megabyte and 512k boards sit close together and generate a lot of heat. To over come this problem, when ever I use my CoCo 3 I leave the top cover off and have a small 6 inch fan blowing across it. This may not be able to be done in some situations due to pets or small children. But for me its quite ok.

If you use OS9 a lot then I recommend you think seriously about the One Megabyte upgrade as I'm sure you will get a lot of use out of it like I have. But be warned, you can get addicted to OS9 by doing so as you have a lot more memory to use how you wish, whether it be for a Ram disk, or for extra programs or what ever you want. The memory is yours to do as you wish.

This product is available from REMCOMS.

□□□□□□□□□□□□□□□□□□□□□□□□□□□

Do you have a heap of CoCo equipment that you would like to sell???

Software, hardware or books and magazines. Just drop me a line and I will place an ad in this magazine for you. Alternatively if you are looking for that piece of hard to find hardware or software, again drop me a line and I will put a wanted ad in for you.

Do you have the germ of an idea for a program but don't know how to get started, let me know and I will put your idea to the CoCo community, you never know what will come of it.

Above all remember that this magazine is here to help you, but, I can not help you if I do not know what you want. Besides contact costs only the price of a stamp or a quick phone call.

ED.

# JVC HR-D92MS VIDEO CASSETTE RECORDER

## A REVIEW BY DESMOND RAE

Are you considering getting rid of your old VCR for a new one, or looking for a new one to start with? Well if your interests lie with the ability to be able to play PAL videos (Australian and European format) or NTSC videos (America and Japanese format), plus would like the ability to sing along with any Karaoke tapes you have in full HI-FI plus have the ability to take the video player ANYWHERE in the world and know it WILL work no matter what the power source or video format ... then please read on.

I have owned my JVC VCR now for a little over a few weeks and I'm certainly impressed with it. One of the best features I found with the VCR is that it will do a noiseless pause when playing back a tape. This makes digitization with Digiscan a lot easier and the pictures look a lot clearer than they have in the past.

This VCR features the following abilities :- HI-FI VHS stereo, Index Search with manual mark/erase, Digital Echo (comes with a JVC microphone, and the echo level is fully adjustable), Multi-system compatibility (Play and record in PAL,MESECAM, AND NTSC), Multi-language on screen display (Chinese/English/Russian), NTSC playback on PAL TV's, 6 head system (DA-4 and 2 Hi-Fi Audio), SP/LP record/playback (EP with NTSC), Next function memory, Variable Search, Full/Index Repeat playback (repeat up to 5 times), Auto Head cleaner, HQ circuitry, Auto Voltage regulator (AC 110-240V), Dual Microphone inputs for duets, Noiseless special effects like still, frame advance, selectable 5-speed forward and reverse slow motion, variable high-speed visual search, double speed forward and normal-speed reverse playback. These can be easily operated with the Jog/Shuttle dial on the remote control. The remote control allows you not only built in memory with battery backup for 3 minutes while changing the main batteries but the Jog/Shuttle control with full LCD display. The remote control keeps time, date, month, year on display. Plus from remote you can set time programming and set the On-Screen display such as setting channels or timer programming.

The VCR will also let you have an 8 event 1 year log programmed in to the timer plus you may also do a Simulcast recording if you wish.
The VCR also has instant timer recording, a built in quartz clock, Hi-Fi audio level controls and indicators with ALC switch, Preroll-capable PAUSE remote control input terminal for use in tape-to-tape editing, Tape Remain/Elapsed display, Full auto functions like Auto-reset Realtime tape counter, Auto play, Auto Rewind, "Summer Time" adjustment

(increase/decrease time by 1 hour), child lock, AFC switch for tuning.
Plus it also has full digital AV tracking (you can have manual if you so desire), full picture control (lets you have one-touch control over the type of video picture you want. Make it clearer, make it better for dubbing, make it softer, or make it sharper), Blank search (lets you find the start of a non-recorded section automatically when you want to record on a partial-recorded tape, plus displays time remaining).

All of this information can be displayed on screen when it occurs or if you want you may turn the on screen display off if you so desire.
One of the really cute touches JVC have added to the system is that when you press the Operate button (either via remote or the front panel) it greets you with the written words, "GOOD MORNING", or "GOOD AFTERNOON", or "GOOD EVENING", depending on the time, plus when you decide you have had enough of watching the "Boob tube" and switch it off, it says "GOOD BYE", or "GOOD NIGHT", also depending on the time of day as well.

Also, should the power go off do not panic, the VCR has a battery backup that will last for 1 hour. If the power doesn't return, don't panic, to reprogram the time you can do it from your remote with about 5 key presses. Should you also try and record on a cassette that has the record tab removed it will tell you, "NO REC TAB", or should you forget to insert a tape it will respond "NO CASS".

You also have the ability with your remote to control your television with it providing of course it has an infra-red panel on front of it. The televisions it will let you take control of are JVC, Graetz, ITT, Luxor, Salora, Seleco, Brandt, Nordmende, Saba, Teleavia, Telefunken, Thomson, Ferguson, Philips, Blaupunkt, Grundig, Sony, Panasonic. This will let you control the TV's volume and channel settings. You may also, (if you have another JVC recorder), perform Duet Editing providing the other VCR can do it also. This allows you to connect 2 VCRs together and get perfect synchronization of tape dubs.

SPECIFICATIONS:-

*General*

Power requirement: AC 110-240 V,50/60 Hz
Power Consumption: 24 W
Temperature: 5 Degrees C to 40 Degrees C (Operating)
-20 Degees C to 60 Degrees C (Storage)
Operation position: Horizontal only
Dimensions (WxHxD): 435 x 94 x 339 mm
Weight: 5.8 kg
Format: VHS standard
Tape width: 12.65 mm
Tape speed (SP): 23.39 mm/sec (PAL/MESECAM)
33.35 mm/sec (NTSC)
(LP): 11.70 mm/sec (PAL/MESECAM)
(EP): 11.12 mm/sec (NTSC)

Maximum recording time:
(SP): 240 min. with E-240 video cassett (PAL/MESECAM)
160 min. with T-160 video cassette (NTSC)
(LP): 480 min. with E-240 video cassette (PAL/MESECAM)
(EP): 480 min. with T-160 video cassette (NTSC)

*Video*
Signal system: PAL colour and CCIR monochrome signals,
625 lines/50 fields,
NTSC colour and EIA monochrome signals,
525 lines/60 fields
Recording system: Rotary two-head helical scan system with slant double-azimuth combination video heads
Input: 0.5 to 2.0 Vp-p, 75 ohms, unbalanced
Output: 1.0 Vp-p, 75 ohms, unbalanced
Signal-to-noise ratio: 43 dB (Rohde & Schwarz noise meter)
Horizontal resolution: 240 lines (PAL) 220 lines (NTSC)

*Audio*
Input: -8 dBs, more than 50 k-ohms, unbalanced
Output: -6 dBs, high-impedance less than 1 k-ohm unbalanced
(100 k ohms, load)

*Normal Audio*
Recording system: Longitudinal track
No. of audio channels: 1 (monaural)
Frequency range: 70Hz to 10,000Hz

*Hi-Fi Audio*
(Hi-Fi audio recording and playback in NTSC EP mode is not possible)

Recording System: Deep-layer recording system conforming to stereo Hi-Fi VHS standard
No. of Audio Channels: 2 Hi-Fi Audio Channels
Frequency response: 20Hz to 20,000Hz
Dynamic range: More than 90dB
Wow and flutter: Less than 0.005% WRMS

*Tuner*
Tuning system: Voltage synthesized tuner
TV channel storage capacity: 48 channels(+ AUX position "AU")
Channel coverage: Band 1: Channels 1-5 (China, U.S.S.R.)
Band 3: Channels 6-12 (China, U.S.S.R.)
Band U: Channels C13 - C57 (China)
Channels E21-E69 (Hong Kong)
Aerial output: UHF channels C24 - C27/(E32 - E40) (adjustable)

*Timer*

Clock reference: Quartz-crystal
Programme capacity: 1-year/8 programme timer
Memory backup time: 3 min. minimum

*Accessories*

Provided accessories: Aerial Cable, Infa-red remote control unit, "R6/UM-3" battery x 2, Plug adapter, Microphone, Audio Cable (RCA-RCA), Video Cable.
Well how much can you expect to pay for this system? Well I dare say that most CoCo users would find the price for this out of their reach, or consider buying a hard disk drive for OS9. Well the price for this is $1399. Which I feel is very good for what you are getting.

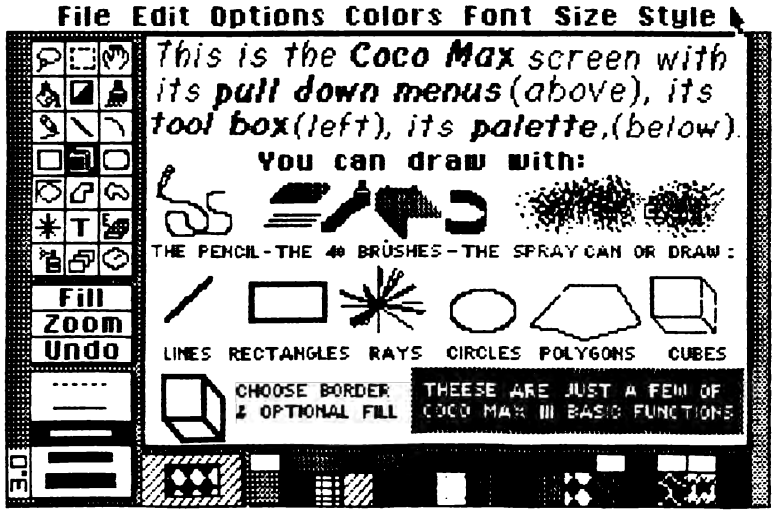
PS. In case any of you are wondering about why I wrote this article, its because I have enjoyed using this VCR so much I thought some more people might be interested in it. I am also in no way connected with JVC nor am I getting any sort of commission for each one of these units sold.

COLORWARE/ALPHA PRODUCTS

NEWS RELEASE

Colorware Inc. is pleased to announce that REMCOMS has been named as its official representative in Australia for its COCOMAX product line. COCOMAX, COCOMAX III and related products are geared toward the Tandy Color Computer market.

REMCOMS will also be providing support for the products. Again, Colorware is pleased to be represented in Australia and is enthusiastic about REMCOMS willingness to carry our product line.


File Edit Options Colors Font Size Style
This is the Coco Max screen with its pull down menus (above), its tool box (left), its palette, (below).
You can draw with:
THE PENCIL - THE 40 BRUSHES - THE SPRAY CAN OR DRAW:
Fill
Zoom
Undo
LINES
RECTANGLES
RAYS
CIRCLES
POLYGONS
CUBES
CHOOSE BORDER & OPTIONAL FILL
THEESE ARE JUST A FEW OF COCO MAX III BASIC FUNCTIONS

# USEFUL SHORTIES

Here are some useful short programmes for all and sundry, they range from small utilities through to fun type littlies.

The first is from Sam Thompson and is a handy little subroutine for CoCo 3 users who want to change programmes written in 32 column to 40 column mode.

Before typing in your listing, type or (C)LOAD in this short subroutine. Then start typing, glance at each line below before typing it, if the next line has a PRINT @ in it .... TYPE GOTO 60000 <ENTER> (no line number). Answer the prompt. A locate number will be displayed, type that next line letting the unnumbered lines scroll up.

For 80 column mode change the multiplier 1.25 in line 60020 to 2.5 and both 39's in line 60030 to 79's. Save them as separate programmes, any more than one prompt becomes irritating.

The Listing:

```
59999 END
60000 INPUT"PRINT@ No.";N
60010 IF N>511 THEN 60000
60020 H=INT((N-FIX(N/32)*32)
*1.25)+.5)
60030 IF H>39THEN H=39
60040 V=INT((N/32*3/2)+.5)
60050 PRINT" USE LOCATE"H" , "V
60060 N=0:H=0:V=0
```

This next one is just a little bit of graphic fun. Using the CoCo3's HSCREEN2, CIRCLE and RND commands, a screenful of coloured half circles are overlapped until you press the BREAK key.

The Listing:

```
10 HSCREEN2 :HCLS14:POKE&HFFD9,0
20 FOR A=1TO 0STEP-.25:HCIRCLE
(RND(319),RND(191)),10,RND(15),1,A,A+.
25: NEXT A:GOTO20
```

One and two line programmes are an excellent way for new users to get their feet wet on the CoCo. You can type them in quickly and then have them running in next to no time. Once you have done this you can then find out WHY they work as they do and then change them around to see what you can come up with.

In fact if enough of you are interested I will start a one liner contest much the same as was being run by the US Rainbow magazine with a suitable prize for each winner.

So send them in folks and lets help out those who are the life blood of our community, the new user.

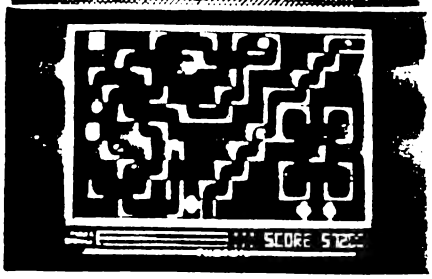
PUBLIC DOMAIN SOFTWARE

FOR MORE INFORMATION SEE THE ADS ELSEWHERE IN THIS MAGAZINE.

# SUNDOG SYSTEMS

## PHOTON

NEW!



Energy is everything: your home world depends on it. However, someone or something is slowly siphoning it away. As your world's champion, you must climb into the experimental Power Tank to challenge this nemesis and his minions. Your key lies with the ability to teleport solid mass. Use this to manipulate and explore the endless stronghold of the enemy, and to exploit the free-floating DUPES (Dense Units of Photon Energy) to destroy the menacing Plasma Droids. Be cautious, though; those DUPES can be deadly, too! Photon, a fantastic new arcade game for your CoCo3, contains spectacular 320x200 resolution, 16 color graphics, ultra-smooth 60 Hz animation, and loads of real-time music and sound effects. It will send your mind racing over endless possibilities, requiring quick decisions and reactions. Quite simply, Photon is incredibly addictive. It will deliver hours of excitement. Will you become your world's greatest hero, or just another energy slave? Req 128K CoCo 3 and disk drive.

## GRAF 2.0 EXPRESS

NEW!

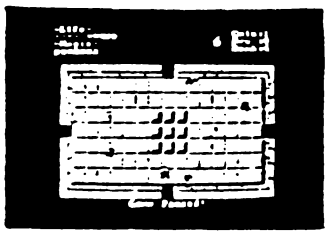
GrafExpress 2.0 is a complete graphics and music programming environment. From the beginner to the accomplished professional you can use GrafExpress to create lightning fast arcade games, graphic applications and utilities, and windowing multimedia demonstrations! The GrafExpress package includes two incredible systems. GrafExpress 16 works on all monitor types and offers support in 12 graphic resolutions (from 128x192 to 320x225). GrafExpress 256 offers 6 resolutions (from 128x192 to 160x225 on a composite monitor) in an astounding 256 colors! Ever see a CoCo do that before? Both systems include standard graphics commands (CIRCLE, FILL, etc.) that blow away the competition. For example, the BOX command peaks out at over 2 MegaPixels/second, that's 300 times faster than BASIC! 255 separate sprites of up to 100x100 pixels each are supported with window clipping and high-res pixel level collision checking. The 8-octave/4-voice music synthesizer has independent envelope, waveform, and volume controls, a 7+ KHz sampling rate, and much more. Other features include text/graphics mixing, different font sizes, fast window copying and scrolling, picture save/load, easy implementation from both BASIC and assembly language, multiple screen animation, and support for 128K/512K, double speed, and the high-res joystick interface. The package also contains support programs that are worth the purchase price of GrafExpress alone! These include an introductory demo, a picture editor, a waveform editor, and an art program that supports 256 colors! GrafExpress also comes with a 50 page manual that fully explains all of its incredible features. If you do any graphics programming or simply want to see what your little CoCo is capable of, GrafExpress is a must! Req 128K CoCo 3 and disk drive.

## War Monger

NEW!

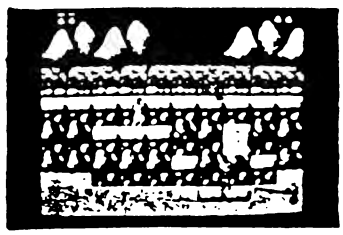
The world is in unrest. Power-hungry villains and evil warlords are readying their forces. It falls to you to lead your people against these armies and only your best strategic plans can save the day. Fight the good fight in any era or locale. Play a simple game of capture the flag armed with water balloons, or climb into the cockpit of a 100 foot high armored warrior. Explore the deepest dungeons, defend your galaxy, or create your own scenarios with this incredible war game construction set/simulator. Your imagination is your only limit. You will deploy your forces with total control over hostile terrain while you scroll a graphic bird's-eye window over an immense world. War Monger has terrific 320x200 resolution, 16 color graphics and includes a tile editor to create or edit your own. Play against the computer, battle with another player, or simply watch the computer play against itself. The enemy is everywhere. Are you ready to take on the challenge as the War Monger? Req 128K CoCo 3 and disk drive.

## The Quest for THELDA



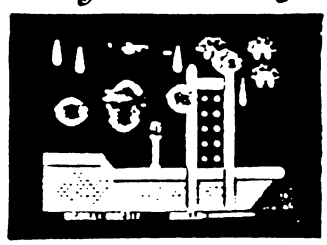
An immensely popular 128K CoCo 3 arcade/adventure. Over 500 screens of fast fantasy action and puzzle solving. Great graphics and sound effects.

## THE CONTRAS



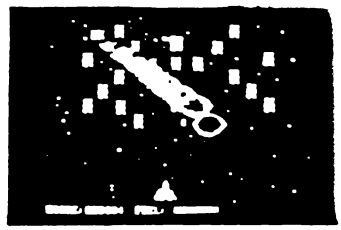
A 512K two player futuristic combat arcade game. Full screen 320x225 hardware scrolling and smooth animation. Back-ground music score and sound effects! 512K Coco3 only.
Shipping soon!

## Crystal City



This was THE game of '91! Ultra-fast space action with hardware scrolling on a 128K CoCo 3. Wild sound effects and over 30 MegaBytes of amazing grzphics!

## ZENIX

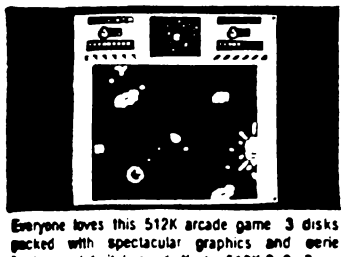


Lightning fast arcade game for the 128K CoCo 3. Terrific 320x225 graphics, back-ground music score and sound effects, and out-of-sight game play.

## ALSO AVAILABLE

- Warrior King — CoCo 3
- In Quest of the Star Lord — CoCo 3
- Mint Sheet
- Hall of the King 1, 2 or 3 — CoCo 1-3
- Hall of the King Trilogy
- White Fire of Eternity — CoCo 1-3
- Dragon Blade — CoCo 1-3
- Champion — CoCo 1-3
- Paladin's Legacy — CoCo 1-3

## Sinistaar



Everyone loves this 512K arcade game. 3 disks packed with spectacular graphics and eerie background digital sound effects. 512K CoCo 3 only.

## RYUU-SAI TO BE NINJA

The best selling 128K CoCo 3 martial arts arcade game. Now available in both RS-DOS and OS-9 versions. Play the incredible combat experience you've been missing under the operating system of your choice!

## SUNDOG SYSTEMS

P.O. Box 766 Manassas, VA 22111
703/330-8989

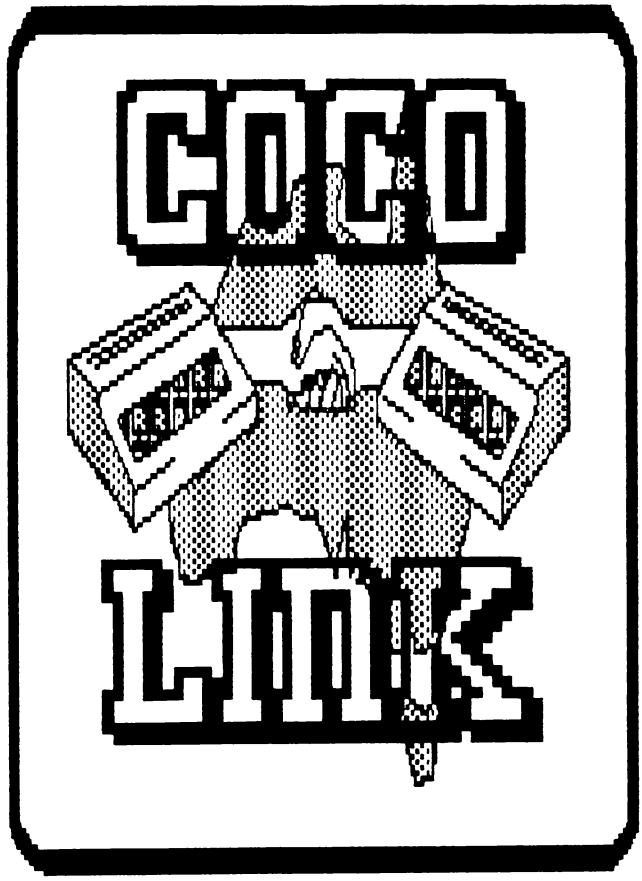
The above software is available in Australia through REMCOMS

# DMP105 UTILITY

For those of you with a DMP105 printer this little utility just might come in handy. If you don't have a DMP105 then you just might be able to do a little adjusting to make it work on your printer. In any case type it in and enjoy this effort by Simon Hutchinson.

```
0 CLS3:CP=PEEK(150):CS$=""
10  PB(1)=9600:PC(1)=1:PB(2)=4800:PC(
2)=7:PB(3)=2400:PC(3)=18:PB(4)=1200:
PC(4)=41:PB(5)=600:PC(5)=87:PB(6)=3
00:PC(6)=180
20 UD$(0)="UP/DOWN ARROWS":
UD$(1)="down/up"+CHR$(128)+"arrows
"
30 FOR L=1TO6:IF CP=PC(L)THEN PS=L
40 NEXTL
50 PRINT@36,"PRINTER BAUD RATE
LEVEL:";:PRINT@107,"BAUD / CODE";
60  FORL=1TO6:PRINT@32*(L+3)+10,CS
$PB(L);"-";STRING$(5-LEN(STR$(PC(L)
)),32)PC(L)CHR$(198);
70 IFL=4THENCS$=" "
80 NEXT
90 FOR L=4TO9:PRINT@32*L+8,CHR$
(198)CHR$(198);:NEXT
100 PRINT@449,"PRESS [ = ] ON
RIGHT BAUD RATE";
110 PRINT@417,"USE "UD$(V)" FOR
CONTROL";:V=1-V
120 PRINT@104+32*PS,"=)";:FOR
LL=1TO99:NEXT:PRINT@104+32*PS,CHR
$(198)CHR$(198);
130 PRINT@353,"CURRENT PRINT
BAUD IS :"PB(PS)":";
140 PRINT@385,"COULD HAVE BAUD
RATE  :"PB(PS)":";
150 GOSUB 910:P$=INKEY$
160 IF P$="^"THEN
PS=PS-1:IFPS=0THENPS=6
170 IF P$=CHR$(10)THEN
PS=PS+1:IFPS=7THEN PS=1
180 IF P$="="THEN POKE
150,PC(PS):GOTO 300
190 GOTO 110
300 CLS3
310 PRINT@32,"please press";:FOR
L=0TO99:NEXT:PRINT@32,"PLEASE
PRESS : [1][5][0] OR [^]":FOR
L=0TO99:NEXT
320 PRINT"[ 1 ] LIST OF DOTS ON
PRINTER":PRINT"[ 5 ] LIST DOTS ON
SCREEN ONLY":PRINT
330 PRINT"[ ^ ] EXIT PROGRAM"
340 GOSUB 910:H$=INKEY$
350 IF H$="1" THEN GOTO 500
360 'IF H$="0" THEN GOTO 700
NOT NEED ON DEMO / IMPROVEMENT
PART OF PROGRAM: DEL 360 OPT.
370 IF H$="5" THEN SO=1:GOTO500
380 IF H$="" THEN GOTO310
390 IF H$="^" THEN 950
400 SOUND200,2:GOTO340
500 SP=1:FORI=128 TO 255 STEP10
510 SP=1-SP:FOR H=0 TO 9:CL=0
520 PRINT@(H+6)*32+SP*17+1,I;
H;I+H;
530 PRINT@(H+6)*32+SP*29+1,"*";
540 PC=I+H-128:FORSC=6TOOSTEP-1:IF
PC<INT(2^SC)THENFG=0ELSEFG=1:PC=P
C-INT(2^SC)
550 PRINT@463-CL*32,"";:IFFG=0
THEN PRINTCHR$(207)CHR$(207);
560 IFFG=1 THEN PRINT CHR$(128)
CHR$(128);
570 CL=CL+1:NEXT
580 PRINT@(H+6)*32+SP*29+1,CHR$
(207);
590 IF I=128 THEN @$="  "
600 IF I>128 THEN @$=" "
610 IF I>227 THEN @$=""
620 GOSUB910:IF SO=1 THENIF
I+H>255 THEN GOTO670 ELSE
NEXT:NEXT
630 IF I+H>255 THEN
PRINT#-2:GOTO660
640 PRINT#-2,CHR$(18);CHR$(I+H);
CHR$(30);@$;I+H-128;
650 NEXT:PRINT#-2:NEXT
660 PRINT#-2,CHR$(30);
670 PRINT@3,"PRESS / TO RETURN
TO MENU!";:FOR L=1TO99:NEXT:
PRINT@3,"press / to return to
menu!";:FOR L=1TO99:NEXT
680 I$=INKEY$:IF I$="/"THEN 300
690 GOTO 670
```

```
700 GOTO 300 : ***** CUT *****
910 OL=0
920 PRINT@8,"PRINTER O";:IF
PEEK(65314)/2=INT(PEEK(65314)/2)
THEN PRINT"NLINE!";:RETURN
930 OL=OL+1:IFOL<5THENGOTO920
940 PRINT"ffline";:RETURN
950 CLS3:GOSUB910:PRINT@32,"THE
END";
960 PRINT@64,"PRINTER BAUD RATE
SET AT";PB(PS)
990 '==========================
1000 'IMPROVE VER. BY SH ADD ON
SCREEN GRAPHIC & PRINTER SPEED
CODEING AND REPACKAGE PROGRAM!
1010 'DON'T KNOW WHO CODED THE
PROGRAM! I JUST WANT TO WISH
THEM THANKS FOR A PROGRAM AND
PUTTING IT IN ONE OF THE MAG'S  I
HAVE GOT OVER THE YEARS ....
1020 ' RECODED '91 OR '92
1030 '==========================
```





# COMPUTER HUT SOFTWARE

32 GEORGE STREET BOWEN QLD 4805
Phone:077 862 220

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# *CoCo III Tool Kit*

## *Disk Commands*

***Backup, Initialize, Directory, Verify, Compare, Search, Edit, Erase, Speed Test, Step Rate Test, Gran Table Analysis & Repair***

## *File Commands*

***Arcive, Copy, Kill, Rename, Erase, View, Edit, Print, Compare, Salvage, Search, Verify, Test Arcive, Un-Arcive, Xmodem Send/Rec.***

Coco Tools is a comprehensive set of disk utilities, providing the most complete set of functions available for the standard R.S. DOS disk system. Comparable in scope and functionality to that of the famous utility available for MS-DOS computers "PC-TOOLS"!

Coco Tools provides fast and easy operation of standard commands like Copy, Rename, Kill, Disk Initialize and Directory thru a consistent and easy to use interface. It provides easy visual selection of files, so multiple file operations can be carried out with very few keystrokes.

Coco Tools is also the most Comprehensive Disk Repair program available, it Automatically diagnosis and repairs file allocation errors, locates corrupt directory information and cross linked files. It provides fast and easy recovery of deleted files without the drudgery normally associated with killed file recovery. It also does lightning fast disk I/O for fast Backup and Copying at speeds you thought only higher priced computers could perform. Coco Tools has multi-file Arciving, Un-Arciving and Test Arciving functions plus the ability to extract any selected group or individual files from a compressed file with easy visual file selection. And allows customizing of display colors, printer/Serial baud rate, Drive step rates and Directory sorting preference. Coco Tools requires a 128K CoCo III, 1 Disk drive and an 80 column display

**The above software is available in Australia through REMCOMS**

*Cer-Comp Ltd.*
*5566 Ricochet Avenue*
*Las Vegas, NV 89110*
*702-452-0632*

# FUEL COST by Ted Beamish

This little beauty from Ted Beamish has come in very handy, I hope that you find it as useful as I did. Keep them coming Ted.
ED.

```
10 '******** TANDY COCO II *******
20 '**                          **
30 '*    fuel   consumption     *
40 '*                           *
50 '*   GUNGADIN SOFTWARE (C)   *
60 '*                           *
70 '*       NOVEMBER 1988       *
80 '**                          **
90 '******************************
100 '
110 POKE359,57:SCREEN0,1
120CLS3:CLEAR:X$=CHR$(191):PRINT@4,"
GUNGADIN  SOFTWARE (C)
";:SOUND123,1
130Z$=CHR$(128):A$=CHR$(198):B$=CHR
$(201):PRINT@33,A$A$A$A$Z$"fuel"Z$Z
$Z$Z$Z$"consumption"Z$B$B$B$B$;
140 PRINT@65,"DISTANCE  KLMS=
MLS=
";:PRINT@78,"";:INPUTK:GOSUB400:IFK=0
GOTO160 ELSE GOTO150
150 M=K*.6214:PRINT@85,USING"MLS=
####.#";M;:GOTO170
160IFK=0THENPRINT@85,"MLS=";:INPUTM
:GOSUB400:K=M*1.609344:PRINT@78,USI
NG"####.#";K;:IFM=0THEN130
170 PRINT@129,"FUEL USED LTR=
GAL=      ";
180PRINT@142,"";:INPUTL:GOSUB400:IFL=
0 THEN GOTO 200 ELSE GOTO190
190G=L*.219973603:PRINT@149,USING"G
AL= ####.#";G;:GOTO210
200IFL=0THENPRINT@149,"GAL=";:INPUT
G:GOSUB400:L=G*4.546:PRINT@143,USIN
G"####.#";L;:IFG=0THEN170
210 PRINT@193,"FUEL COST LTR$
GAL=$     ";
220PRINT@206,"";:INPUTLC:GOSUB400:IF
LC=0THEN GOTO 240 ELSE GOTO230
230GC=LC*4.546:PRINT@213,USING"GAL=
$$#.##";GC;:GOTO250
240IFLC=0THENPRINT@213,"GAL=";:INPU
TGC:GOSUB400:LC=GC*.219973603:PRINT
@206,USING"$$##.##";LC;
250 PRINT@224,STRING$(32,179);
260 MG=M/G:KG=K/G:ML=M/L:KL=K/L
270PRINT@257,USING"mls/gal=##.###";
MG;
280PRINT@273,USING"klm/gal=##.###";
KG;
290 PRINT@352,STRING$(32,188);
300PRINT@321,USING"mls/ltr=##.###";
ML;
310PRINT@337,USING"klm/ltr=##.###";
KL;
320 GOSUB400
330 IFGC=0THENGOTO340 ELSE GOTO350
340 INPUTQ:GOTO390
350 Z=LC*L
360 PRINT@449,USING"FUEL COSTS = $
####.##";Z;:ZM=Z/M
370PRINT@431,USING"PER/MILE=$$#.##
#";ZM;:ZK=Z/K
380 PRINT@495,USING"PER
/KLM=$$#.###";ZK;
390 PRINT@302,"";:INPUTQ:GOTO120
400 SOUND10,2:SOUND100,1:RETURN
**********************************
```

## HOME HELP SHORTIE

This two liner uses Zeller's congruence method to determine the day of the week for any date after the year 1900. Find out what day of the year you or your friends were born on.

```
1 INPUT"MONTH,DAY,YEAR";M,D,Y:IF
M>12 OR M<0 OR D>31 OR D<0 OR
Y<1900THEN1 ELSE IF M<2THEN
F=365*Y+D+3*(M-1)+INT((Y-1)/4)-INT(
.75*INT(((Y-1)/100)+1)) ELSE
F=365*Y+D+31*(M-1)-INT(.4*M+2.3)+IN
T(Y/4)-INT(.75*(INT(Y/100)+1))
2 A=(INT(F)+INT(-F/7)*7)*-1+1:IF A=1
THEN PRINT"SATURDAY"ELSE IF
A=2THEN PRINT "FRIDAY"ELSE IF A=3
THEN PRINT"THURSDAY"ELSE IF A=4
THEN PRINT"WEDNESDAY"ELSE IF
A=5THEN PRINT"TUESDAY"ELSE IF
A=6THEN PRINT"MONDAY"ELSE IF
A=7THEN PRINT"SUNDAY"
```

# FOR SALE AND WANTED

As promised I have now included a for sale and wanted section in the magazine. If you want to sell something for the CoCo or you are looking for a particular programme or piece of hardware then drop me a line I will include it in this section for you.

## FOR SALE

1 x CoCo 3 512K
1 x CM8 RGB Monitor with pedestal
2 x Double sided disk drives & controller
1 x Tandy Mouse
1 x Tandy self centreing joystick
Lots of software and manuals and 1 made up switch box.
All in good condition:
Total price $400

Mr W. Dixon
27 Glenthorn Crescent
O'Halloran Hill
S.A. 5158
(08) 322 3793

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1 x CGP220 Colour Printer with spare cartridges.
Perfect working order.
$300 plus postage.
Contact this magazine for details:

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Back issues of CoCo, Softgold, Australian Rainbow, Hot CoCo and US Rainbow. Prices from $2 to $8 .
Contact this magazine for details.

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Disk drives 35Trk single sided and 40Trk double sided from $20.
Contact this magazine for details.

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## WANTED

Multi Pak Interface for CoCo 3

Fred Remin
11 Corcoran Cres
Canungra QLD 4275
(075) 435 821

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External Modem for CoCo 3
Auto ranging 300 to 2400 Min

Fred Remin
11 Corcoran Cres
Canungra QLD 4275
(075) 435 821

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Ham Radio programs compatible with the CoCo (CoCo 3 prefered)

Darren Stevens
16 Hewitt St
Colac VIC 3250
(052) 321 981

□□□□□□□□□□□□□□□□□□□□□□□□□□□□

CoCo 3 version of Leisure Suit Larry

Contact this magazine for details.

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Your ad can go right here, drop me a line or give me a call.
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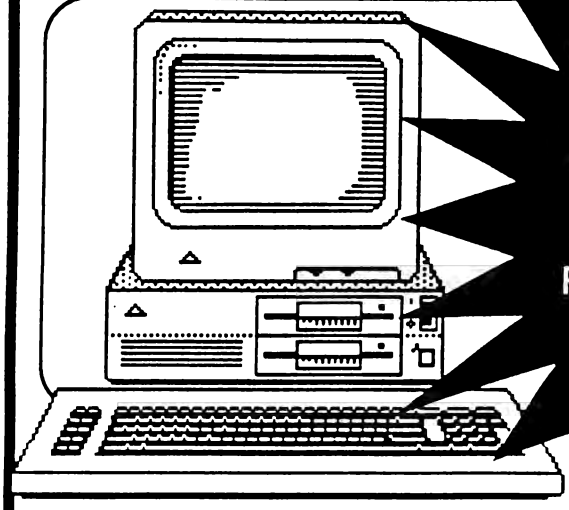
# COCO FRIENDS DISK MAGAZINE

"The most exciting new product for the CoCo Since....?"



COCO FRIENDS DISK MAGAZINE (CFDM) is devoted exclusively to those who still enjoy running under RS Dos. The standard system needed to use CFDM is CoCo 3, RGB monitor, at least one disk drive, and the RS Dos which came with your CoCo 3.

CFDM is a monthly disk based publication which is produced on a "flippie" disk. When you "Run" the "magazine" side of CFDM, you'll be greeted with a beautiful cover picture by CoCo Friend James Gibbons. Pressing any key takes you to the magazine's colorful Main Menu. There you'll find 14 sections which are filled with entries. Sections included are: About CFDM; About this Issue; Active CoCo; Advertisements; CoCo Friends Art Gallery; Articles of the Month; Family Tree; Forum; From the Editor; Letters to the Editor; Potpourri; Programs of the Month; Reviews; and Question & Answers.

Next you will enter a Section and find a number of entries written by our CoCo Friends from all over the world. Each issue of CFDM contains from 60 to 80 entries. Some sections contain documentation about the many programs and graphics found on the "flip-side" of CFDM.

The "flip-side" or "program" side of CFDM is filled with contributions of wonderful programs and graphics from our many CoCo Friends! Each issue has from 2 to 4 hi-res pics and from 8 to 15 never-before-seen programs.

**8 to 15 never-before-seen programs**

**The above software is available in Australia through REMCOMS**

**RICK'S COMPUTER ENTERPRISE**

(606) 787-5783
CODs Add $2.50
P.O. BOX 276
LIBERTY, KY. 42539

# STAR WAR DEATH STAR

Here is another little gem sent in by Simon Hutchinson. Keep them coming Simon I am sure that these and any others you send in will be appreciated by the CoCo community.

```
0 CLS0:PRINT"STAR WAR DEATH
STAR":PRINT"PRESS ^ TO RERUN
PROGRAM":PRINT"PRESS - TO EXIT
PROGRAM":PRINT"(C) COCO 2 VER.
1985":PRINT"PROGRAM BY SIMON
HUTCHINSON"
5 PRINT@320,"PRESS [ SPACE-BAR ]
TO CONT.";:GOSUB7:PRINT@328,
"space-bar";:GOSUB7:IF INKEY$<>" "
THEN 5 ELSE 10
7 FOR L=1TO150:NEXT:RETURN
10 POKE65495,0:GOSUB60
20 GOTO80
30 SCREEN0,1:CLS4:PCLS0:GOSUB120:
SCREEN1,1:RETURN
40 PMODE3,1
50 RETURN
60 PMODE4,1:SCREEN1,1
70 RETURN
80 PCLS0:COLOR1,1
90 GOTO260
100 CIRCLE(0,191),45,1,1,.75,0
110 PAINT(2,188),3,1
120 CIRCLE(35,35),25,1,1,.98,.77:
DRAW"C1BM37,10;D4R3D7R6U4R6D8L5D3R
9U3R2D6"
130 CIRCLE(35,35),25,1,.5,0,.5:
PAINT(35,55),1,1
140 CIRCLE(21,31),5,1:CIRCLE(21,31),7,1:
CIRCLE(21,31),2,1
150 RETURN
160 FOR T=1TO255 STEP5:SOUND
T,2:NEXT:LINE(21,31)-(2,192),PSET:FOR
N=1TO500:NEXT:PAINT(2,188),0,0:GOSUB
30:FOR T=255TO1 STEP-8:SOUND T,2:
NEXT
170 RETURN
180 LINE(56,60)-(160,116),PSET:LINE(1
60,116)-(204,104),PSET:LINE(160,116)-(
204,128),PSET:LINE(204,104)-(248,116),
PSET:LINE(204,128)-(248,116),PSET:LIN
E(56,60)-(204,104),PSET:FORT=4TO7STE
P3:CIRCLE(204,116),T,1:CIRCLE(188,116),
T,1:CIRCLE(220,116),T,1:NEXT
190 PAINT(188,116),1,1:PAINT(204,116),
1,1:PAINT(222,116),1,1:LINE(160,116)-(2
48,116),PSET:LINE(188,88)-(220,96),PS
ET,B:LINE(188,96)-(180,92),PSET:LINE(1
80,84)-(188,88),PSET:PAINT(204,126),1,
1
200 LINE(180,92)-(180,84),PSET:LINE(1
80,84)-(212,84),PSET:LINE(212,84)-(22
0,88),PSET:LINE(200,93)-(208,108),PSE
T,BF:LINE(152,88)-(180,89),PSET:LINE(1
52,88)-(200,108),PSET:PAINT(184,100),1
,1:PAINT(184,90),1,1:CIRCLE(188,80),6,1,
1:CIRCLE(212,80),6,1,1
210 PAINT(188,80),1,1:PAINT(212,80),1,
1:CIRCLE(124,84),2,1:CIRCLE(128,88),2,1
:CIRCLE(78,70),2,1
220 RETURN
230 CIRCLE(250,198),130,1,.4:
PAINT(250,190),1,1:RETURN
240 RETURN
250 GOTO270
260 GOSUB100:GOSUB160:GOSUB230:
GOSUB180:GOSUB240
270 SOUND200,1
280 IF INKEY$="^" THEN
CLS0:SCREEN0,1:GOTO10
290 IF INKEY$="-" THEN CLS0:END
ELSE 280
300 ' HAVE FUN ON THE COCO !!!!
```

## PCCC

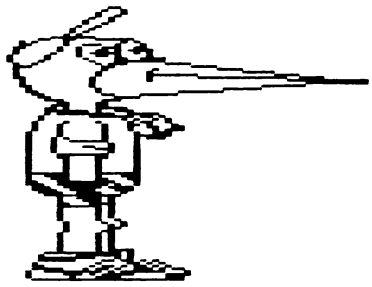
Peninsular Colour Computer Club

The PCCC is a user group which could argueably be the longest running CoCo user group in Australia. The club has been going strong for 11 years that I know of and is still a plethora of information on the CoCo.

They are based on the Mornington peninsular in Melbourne and can be contacted by phoneing :

Greg MacKenzie (059)838 991
Bob Charleston (059)791 922
Barry Eling (059)711 338
Stan Blazejewski (03)580 4605

# NEWSPAPER 09



VISA MASTERCARD Accepted

Well what do you think of it so far? This page has been put together entirely using stock standard Newspaper09. I for one am impressed with the programme so much so that I have orderded the clip art disks to go with it

But what is it? Well, Newspaper is a graphics oriented, speedy, enjoyable word processor. It is along the same lines as the Home publisher from Tandy, but, much faster and easier to use. It has more features in a more understandable point and click environment.

One of the things I really enjoy about **THIS PROGRAMME IS THE ABILITY** to change to a myriad of fonts at will. These fonts range from the standard fonts through to BELLS

**Apart from the quite large range of fonts there is also a quite extensive range of clip art which comes with the original disks.**

These clip art pictures can be pasted any where on the page including over the text. I for one am looking forward to the additional disks which contain hundreds of pictures.

The uses for this programme are limited only by your own imagination. It could be used by students to make up project pages for school, posters, cards, small business could use it to produce adds with a difference.

It could be used for your local community newsletter or your own user group newsletter. To put up NO-SMOKING signs at work, or even produce a few cartoons for the school paper. Maybe a nice looking poster for the kids door with the jobs for the week on it they just might take notice.

Newspaper 09 is a versatile and useful programme well worth the money. It is available from REMCOMS (see add inside front cover). Just to round off I will fill these last panels with a few clip art pictures for you just to show off.

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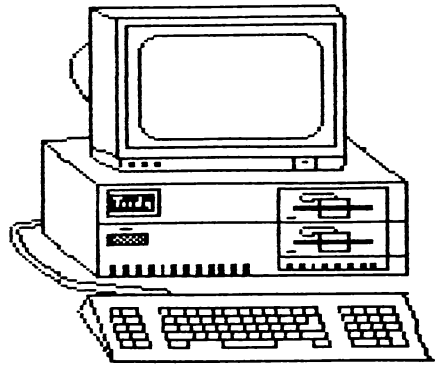
A DIVISION OF TANDY CORPORATION



## PUBLIC DOMAIN LIBRARY

The COCO-LINK PUBLIC DOMAIN LIBRARY catalogue has been sent out to all those people who have shown an interest in these disks in the past. The catalogue lists all disks available (at the time of printing) and gives a small description of each programme on the disk. It contains 30 disks at this time, not including the disks mentioned in this article. Disks are being added all the time as material comes to hand. The catalogue will be updated at intervals as necessary. Should you wish a copy, please send your name and address to the address listed below. This issue reviews 3 of the new disks which have been added to the catalogue. The first disk is devoted to Coco 3 with mainly games but a few programmes of other interest. The other 2 disks are in the graphics arena, with one disk containing the well known Coco paint programme MCPAINT, and the other disk with two sides of pictures to display on your screen using the viewer from the previous disk.

### GAMES DISK 014 COCO 3 GAMES +

This disk contains 14 programmes for the Coco 3. All but 3 of them are games which include PURSUIT, an arcade game written in SA and which was distributed by Tandy some years ago. The other games include a mini-golf game, Yahtzee and Solitaire. The non-games are: HARNESS, which is a handicap programme for harness racehorses. PIXGRID, which is a small utility and 3JOSKAL which is a kaliedoscope programme written by our old friend Johanna Vagg.

Programmes on the disk are:

| | | |
|---|---|---|
| 3BOXES | 3HANGMAN | 3JOSKAL |
| 3SOLITAR | BUNKERS3 | CHAOS |
| CRAPS3 | EAGLPOKE | HARNESS3 |
| MINIGOLF | PIXGRID | PURSUIT |
| REACT 3 | YAHTZEE3 | |

### GRAPHICS DISK 047 GFX VIEW/EDIT

This disk contains MCPAINT which is a drawing programme for Coco. As well as MCPAINT the disk contains a set of 10 fonts for use with the programme. Full documentation is included on the disk. There is a utility for transporting MAC pictures to coco format for use in this programme. There is also a view programme which will display MAC pictures on screen. There is a total of 20 files on this disk and all in all it is a top disk for those of you interested in graphics and painting.

### GRAPHICS DISK 048 GFX CELEBRITIES

This is two sides of pictures to use in conjunction with the proceeding disk. These pictures have been transposed from Apple Macintosh files to Coco format. They depict some of the celebrities that you know so well. In conjunction with MCPAINT, these pictures can be altered or edited as you see fit or they can be viewed using the view utility on DISK 047.

The pictures are:

| | | |
|---|---|---|
| 3STOOGES | BEATLES1 | BEATLES2 |
| BROOKE | CARSON | EDDIE |
| GEEWALLY | KIM | KIRK |
| LCARTER | LEONARDO | MARLONB |
| MATTIE | | |

More picture disks will be reviewed in the future. These disks and all those in the catalogue are available for $5.00 inc.P&P from:

Robbie Dalzell
31 Nedland Cres.
Pt. Noarlunga Sth.
S.A. 5167

(Make cheque/money orders payable to R.Dalzell).

# DRAWING BOARD

A Flashing Ray Drawing Board
(32K ECB)
by Keiran Kenny

This program is a short, simple emulation of Tom Lehane's RAYLINE programs that will be known to many CoCo users in Australia.

Choose option 3 on the title screen and you have a flashing cursor at the center of the PMODE4 graphic screen. Depress an arrow key to move the cursor to wherever you want to start your first line. Press B to Begin drawing and a flashing line will move in the chosen direction. Depress a horizontal and vertical arrow together for diagonal movement. Depress the spacebar to speed up the movement of the cursor or a line.

You can vary the angle and direction of a ray by juggling the arrow keys. For a curved line, use short swings of the ray and short lines.

When the flashing line is long enough, press E to mark its End. You can then press A to Accept the line. The cursor is then at the line's end, and you can press B to begin a new line from that point or move the cursor elsewhere. Press R to REJECT the line and the cursor returns to its previous position.

You can also draw circles, ovals and semi-circular arcs . To begin, move the cursor to set the center of your circle or arc and press C. Move left, right, up or down to set the length of your radius. Press P. The cursor returns to screen center. Move up or down to establish the height of a circle or oval, and press N.

Move up and press B to draw an arc closed at the top, or move down and press B for an arc open at the top.

Move up and press O for a right hand arc. Move down and press O for a left hand arc.

Actually, you can move the cursor in any direction before pressing P, but results will only ne predictable if you stick to horizontal or vertical movement. To draw a true circle, move up or down, press P and then move until the flashing cursor covers the pixel set at point P.

I hope the illustrations in the accompanying picture will make these instructions clearer.

Press S at any time to SAVE your picture. Enter a filename and your picture will be saved as a data file containing the values of the last X and Y coordinates, and then as a binary file containing the picture. This ends the program.

To load a picture drawn with this program press 1 at the title screen prompts and enter the filename. After the picture is loaded, the cursor is where it was when you saved the picture. You can continue drawing from that point.

Press 2 on the title screen menu to load any other PMODE4 picture file. The cursor is then at screen center.

If you have a disk drive plugged in, all saves/loads are to/from disk, otherwise to/from tape. Line 40 establishes the value DV=1 for a disk drive.

You can abort a drawing or end the program at any time from the graphic screen by pressing CLEAR. This restores operating speed to normal.

The high speed poke is in effect except when you are saving or loading. Line 50 establishes the values SP and SL according to whether you are using a CoCo 3 or an earlier CoCo.

The cursor will flash black on white or white on black to ensure visibility at all times. You can move it across existing figures in your picture and it will not punch gaps in them..

Existing graphics will not be damaged if you sweep a flashng ray across them: see line 490. Immediately before the ray flashes on, subroutine 20 PCOPIEs the screen to pages 5 - 8. After it flashes off, pages 5 - 8 are PCOPIEd back to pages 1 - 4.

If your picture is finished and you want to load it for viewing without the distraction of the flashing cursor, try this short loader for PMODE4 pictures:

```
10 CLS
20 INPUT"LOADM PIX:",P$
30 PMODE4,1:COLOR0,5:PCLS:SCREEN1,1
40 LOAD MP$
50 EXEC44539:GOTO10
```

```
0 'MINIRYLN' BY KEIRAN KENNY
 WITH ACKNOWLEDGEMENTS TO TOM
 LEHANE
10 GOTO640
20 FOR PG=1TO4:PCOPY PG TO
PG+4:NEXT:RETURN
30 FOR PG=5TO8:PCOPY PG TO
PG-4:NEXT:RETURN
40 IF PEEK(&H15F)=196THEN DV=1ELSE
DV=-1
50 IF PEEK (&HFFFE)*256+PEEK
(&HFFFF)=&H8C1B THEN
SP=65497:SL=65496 ELSE
SP=65495:SL=65494
60 PMODE4,1:COLOR0,5:PCLS
70 CLS:PRINT@128,"YOU CAN:"
80 PRINT@194,"1. LOAD A PICTURE
SAVED",TAB(5)"WITH THIS PROGRAM"
90 PRINT@290,"2. LOAD ANY PMODE4
ML PIXFILE"
100 PRINT@354,"3. DRAW A NEW
PICTURE"
110 PRINT@424,"PRESS 1 - 3"
120 K$=INKEY$:IF K$<>"1"AND
K$<>"2"AND K$<>"3"THEN120
130 IFK$="3"THEN220
140 CLS:PRINT@224,"";:INPUT"LOAD
PIXNAME:";PX$
150 POKESL,0:SCREEN1,1
160 IFK$="2"THEN200
170 OPEN"I",#DV,PX$
180 INPUT#DV,X,Y
190 CLOSE#DV
200 IF DV=1THEN LOADM PX$:IF
K$="2"THEN 230 ELSE240
210 CLOADM PX$:IF K$="2"THEN 230
ELSE240
220 SCREEN1,1
230 X=128:Y=96:H1=X:V1=Y
240 POKE SP,0
250 IF PEEK(341)=247THEN Y=Y-N
260 IF PEEK(342)=247THEN Y=Y+N
270 IF PEEK(343)=247THEN X=X-N
280 IF PEEK(344)=247THEN X=X+N
290 IF PEEK(345)=247THEN N=4ELSE
N=1
300 IF Y<0THEN Y=0
310 IF Y>191THEN Y=191
```

```
320 IF X<0THEN X=0
330 IF X>255THEN X=255
340 IF PEEK(135)=66THEN
B=1:H1=X:V1=Y:GOTO490
350 IF PEEK(135)=67THEN C=1:GOSUB
20:CX=X:CY=Y:PSET(CX,CY):POKE 135,0
360 IF C AND PEEK(135)=80THEN
P=1:R=SQR (ABS(CX-X)^2+ ABS
(CY-Y)^2):PSET(X,Y):PX=X:PY=Y:X=CX:
Y=CY:POKE 135,0
370 IF C AND P AND PEEK
(135)=78THEN PRESET
(PX,PY):H=ABS(CY-Y)/R:CIRCLE(CX,CY)
,R,,H
380 IF C AND P AND Y<CY AND
PEEK(135)=81THEN PRESET
(PX,PY):H=(CY-Y)/R:CIRCLE(CX,CY),R,,
H,.5,1
390 IF C AND P AND Y>CY AND
PEEK(135)=81THEN PRESET
(PX,PY):H=(Y-CY)/R:CIRCLE(CX,CY),R,,
H,0,.5
400 IF C AND P AND Y<CY AND
PEEK(135)=79THEN PRESET
(PX,PY):H=(CY-Y)/R:CIRCLE(CX,CY),R,,
H,.75,.25
410 IF C AND P AND Y>CY AND
PEEK(135)=79THEN PRESET
(PX,PY):H=(Y-CY)/R:CIRCLE(CX,CY),R,,
H,.25,.75
420 IF C AND P AND
PEEK(135)=65THEN GOSUB
20:C=0:P=0:PRESET(CX,CY):X=CX:Y=CY
430 IF C AND P AND
PEEK(135)=82THEN GOSUB
30:C=0:P=0:PRESET(CX,CY):X=CX:Y=CY
440 IF B THEN490
450 IF PEEK(135)=83THEN550
460 BG=PPOINT(X,Y):IF BG=0THEN
CL=5ELSE CL=0
470 PSET(X,Y,CL):FOR DL=1 TO 100
:NEXT:IF PEEK (135)=12 THEN 630
ELSE PSET(X,Y,BG)
480 GOTO250
490 GOSUB 20 : LINE (H1,V1)-(X,Y),
PSET:FOR DL=1TO30:IF PEEK(135)=69
THEN 500 ELSE NEXT :LINE
(H1,V1)-(X,Y), PRESET:GOSUB 30:IF
PEEK(135)=12THEN630ELSE250500
POKE135,0:B=0:H2=X:V2=Y:LINE(H1,V1)-
(H2,V2),PSET:X=H2:Y=V2
510 K$=INKEY$:IF K$<>"A"AND
K$<>"R"THEN510
520 IF K$="A"THEN X=H2:Y=V2
530 IF K$="R"THEN GOSUB
30:X=H1:Y=V1
540 GOTO250
550 POKE SL,0:CLS
560 PRINT@224,"";:INPUT"SAVE
PIXNAME:";PX$
570 OPEN"O",DV,PX$
580 SCREEN1,1
590 PRINT#DV,X,Y
600 CLOSE#DV
610 IF DV=1THEN SAVEM
PX$,3584,9727,40999:GOTO630
620 CSAVEM PX$,1536,7679,40999
630 POKE SL,0:CLS:END
640 PCLEAR8:GOTO40
```

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NATIONAL OS9 USER GROUP

The National OS9 User Group is based in Brisbane and caters for those CoCo users who are well into OS9/OSK. They produce a monthly newsletter and have an extensive library for the use of members.

Subscriptions to the magazine are only $18 per year, (the same as CoCo-Link) and at this price is well worth it if you wish to keep up to date in the world of OS9.

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# PEEK 135 + 16K (ECB)

PEEK(135) Plus
(16K ECB)
by Keiran Kenny

If you added the extra lines to PEEK135A, as in Cursor Control (CoCo Link Aug. 91) then you should have an idea of the basics of cursor movement control using PEEK(135) yechniques.

PEEK135+ uses most of the code in the enhanced PEEK135A to structure a simple drawing board. In addition to the movement keys, the listing includes function keys, 1 to 4 and H, as explained below, in addition to the movement keys.

When you run the program, the flashing cursor is at screen center and you can use the movement keys to position it on the screen as before. Press 2 and line 250 establishes the value, L=1. Press a movement key and line 260 draws a line on the screen in the chosen direction. The program will continue to draw lines until you press 1, when line 240 sets the value, L=0, and the flashing cursor is restored in lines 270 and 280.

Lines 50 to 80 ensure that the cursor or line stops when you reach a boundary of the graphic screen area. Otherwise, if it is moving diagonally, it will continue to move vertically or horizontally along the boundary. You now have to tap an arrow key, or 8, W, A or S as appropriate, to move along or away from the boundary.

Line 180 accesses the save routine, lines 300 to 380. Press 3 and enter your filename. Lines 320 to 340 establish a small data file containing your current X and Y value. Lines 360 or 370 then save your graphic screen to disk or tape. Line 380 returns you to the graphic screen and you can add to your picture from where you left off.

Line 10 establishes the values, DV=1 or DV=-1, according to whether you are using disk or tape. Disk files are saved with the extensions /DAT and /BIN.

Line 190 accesses the load routine, lines 390 to 460. Press 4 and enter your filename. Lines 420 to 440 load the data file containing your last X and Y values and lines 450 or 460 then load the picture file from tape or disk. The cursor is now at its previous position and you can continue drawing from there.

The cursor and line movement are somewhat slow, but intentionally so to ensure easier control. If you want more speed, change the value 100 in lines 260 and 280 to a lesser value.

To stop movement, press any key other than a function key or a movement key. I would recommend the spacebar. To resume movement press a movement key.

If at any time you are unsure of which key to press, press H to access the Help screen, lines 480 to 580. Press ENTER to return to the graphic screen.

```
0 'PEEK(135)+' COPYRIGHT KEIRAN
KENNY, SYDNEY, 1990.
10 IFPEEK(&H15F)=196
THENDV=1ELSEDV=-1
20 PMODE4,1:COLOR0,5:PCLS:SCREEN1,1
30 X=128:Y=96
40 PK=PEEK(135)
50 IF X=0 AND (PK=65ORPK=81)THEN
POKE135,0:GOTO40
60 IF X=255 AND
(PK=87ORPK=83)THEN
POKE135,0:GOTO40
70 IF Y=0 AND (PK=81ORPK=87)THEN
POKE135,0:GOTO40
80 IF Y=191 AND (PK=65ORPK=83)THEN
POKE135,0:GOTO40
90 IFPK=94THENY=Y-1
100 IFPK=10THENY=Y+1
110 IFPK=8THENX=X-1
120 IFPK=9THENX=X+1
130 IFPK=81THENY=Y-1:X=X-1
140 IFPK=87THENY=Y-1:X=X+1
150 IFPK=65THENY=Y+1:X=X-1
160 IFPK=83THENY=Y+1:X=X+1
170 IFPK=51THEN300
180 IFPK=52THEN390
190 IFPK=72THEN480
200 IFY<0THENY=0
210 IFY>191THENY=191
220 IFX<0THENX=0
230 IFX>255THENX=255
240 IFPK=49THENL=0
250 IFPK=50THENL=1
260 IFL THEN PSET(X,Y):FOR DL=1 TO
100:NEXT:GOTO290
270 BG=PPOINT(X,Y)
280 PSET(X,Y):FOR
DL=1TO100:NEXT:PSET(X,Y,BG)
290 GOTO40
300 POKE135,0
310 CLS:PRINT@224,"SAVE FILENAME
";:INPUTF$
320 SCREEN1,1
330 OPEN"O",#DV,F$
340 PRINT#DV,X,Y
350 CLOSE#DV
360 IF DV=1THEN SAVE
MF$,3584,9727,40999:GOTO380
370 CSAVEMF$,1536,7679,40999
380 GOTO40
390 POKE135,0
400 CLS:PRINT@224,"LOAD FILENAME
";:INPUTF$
410 SCREEN1,1
420 OPEN"I",#DV,F$
430 INPUT#DV,X,Y
440 CLOSE#DV
450 IF DV=1THEN LOADM F$:GOTO470
460 CLOAD MF$
470 GOTO40
480 POKE135,0:CLS:PRINT"KEY CODES:"
490 PRINT:PRINT"ARROWS - UP,DOWN,
LEFT OR RIGHT"
500 PRINT:PRINT@140,"@  W"
510 PRINT@173,"@/"
520 PRINT@205,"/@"
530 PRINT@236,"A  S"
540 PRINT:PRINTTAB(4)"1 -
CURSOR","2 - LINE"
550 PRINT:PRINTTAB(4)"3 - SAVE","4
- LOAD"
560 PRINT:PRINTTAB(10)"H - HELP"
570 PRINT@486,"PRESS
ENTER";:INPUTEN$
580 SCREEN1,1:GOTO40
```


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**J.W.T ENTERPRISES**

==========

OPTIMIZE UTILITY SET 1

-)Optomize your floppies and hard drives quickly and easily.

-)Includes utility to check file and directory fragmentation.

-)Works alone or with Bourke & Bourke repack utility.

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$45 + P&P from REMCOMS

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## More on Animation

by Keiran Kenny

You can speed up the animation in Tom Lehane's wing-flapping bird program (CoCo-Link, Aug/SEP) by using a "speed" GET-PUT: left and upper-left coordinate a multiple of eight; right and lower-right coordinates one less than an multiple of eight. To apply a speed GET-PUT and have the bird fly across the screen, make the following changes to Tom's listing.

```
60 DIMB(576),C(576),E(576)
70 PMODE4:PCLS1:COLOR2
75 GET(0,0)-(47,47),E
100 LINE(A-4,B)-(C-4,D),PSET
400 GET(104,72)-(151,119),B
410 PMODE4:PCLS1:COLOR2
420 FORZ=1TO26
440 LINE(A-4,B)-(C-4,D),PSET
730 GET(104,72)-(151,119),C
740 PCLS1:SCREEN1,1
750 X1=0:X2=47
760 PUT(X1,72)-(X2,119),B
770 FORT=1TO100:NEXT
780 PUT(X1,72)-(X2,119),E
790 PUT(X1,72)-(X2,119),C
800 FORT=1TO100:NEXT
810 PUT(X1,72)-(X2,119),E
820 X1=X1+16:X2=X2+16
830 IFX1>208THENPCLS1:GOTO750
840 GOTO760
```

Deleting the SCREEN statements in lines 70 and 740 allows you to draw "behind the scenes".

Line 60 dimensions enough space for three 48 x 48 rectangles. Line 75 stores a 48 x 48 blank area of the screen, labelled E, for use as an eraser.

In lines 100 and 440, the image is moved left four pixels so that it begins at horizontal 104 (a multiple of eight). The GET statements in lines 400 and 730 are amended accordingly. In this context, the G and PSET options on GET and PUT statements can be dispensed with.

The PUT statements in lines 750 to 840 PUT the image in flaps-up position at horizontal coordinate 0, erase it, PUT it in flaps-down position, erase it, and move it 16 pixels to the right. Line 830 effectively repositions the image at the left of the screen.

Finally, delete line 540 or close it off with a REM marker. This line draws part of the bird's undercarriage that was visible through the wing in flaps-down position. Attention to little details like this can serve to make animation much more convincing.

Try reducing the value 100 in lines 770 and 800. If you make it much smaller, you will get an image that, for the eye, seems to display the wings in both positions at once. You could also reduce the value 16 in line 820 to 8 to slow down the movement across the screen, or increase it to 32 (always multiples of eight!), to speed it up.

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If you would like your name included in the above list in order to help other cocoists and to maintain contact between us, then send the above information to me for inclusion.

Do you know of the existence of a user group in your area or are you considering starting one up again? Let me know the details including the contact names and phone numbers, meeting place, times etc, and I will print it in this magazine.

REMEMBER, USER GROUPS ARE THE BACKBONE OF THE COCO COMMUNITY!

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